

SYLLABUS FOR GSAT-2019

FOR ADMISSION IN TO M.Sc. Environmental Science (TEST CODE NO: 105)

SECTION – A

(15 bits: 15 Marks)

Multidisciplinary nature of Environmental Studies: Definition, Scope and Importance – Need for Public Awareness.

Ecosystems: Concept of an ecosystem - Structure and function of an ecosystem - Producers, consumers and decomposers - Energy flow in the ecosystem - Food chains, food webs and ecological pyramids. Typical Structure of Ecosystem – Forest, Grassland, Desert and Aquatic ecosystems.

Biodiversity and its conservation: Biodiversity, Definition, Types of Biodiversity (Genetic, Species and Ecosystem), Causes for depletion of biodiversity, Ecological importance of biodiversity Conservation of Biodiversity at national level.

SECTION – B

(20 bits: 20 Marks)

Natural Resources : Forest resources – Use and over – exploitation, deforestation - Mining, dams and other effects on forest and tribal people.

Water Resources – Use and over utilization of surface and ground water – Floods, drought, dams – benefits and problems - Food resources: World food problems, effects of modern agriculture, fertilizer-pesticide problems, water logging and salinity.

Energy and Land resources: Solar Energy, Wind Energy, Types of Indian Soils, Reasons for depletion of fertile soil and conservation of soils.

SECTION – C

(25 bits: 25 Marks)

Environmental Pollution: Definition, Cause, effects and control measures of Air pollution, Water pollution, Soil pollution and Noise pollution.

Solid waste Management: Causes, effects and control measures of urban and industrial wastes. – Role of an individual in prevention of pollution.

Social Issues and the Environment: From Unsustainable to Sustainable development -Urban problems related to energy - Water conservation, rain water harvesting, and watershed management.

Global Environmental Problems: Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents.

Human Population and the Environment: Environment and human health. Trends of Population growth in urban areas, reasons for population explosion and its control.

MODEL QUESTIONS

1. The term “Ecosystem” is coined by []
a) Ernst Haeckel b) Frederic Clements c) E .P. Odum d) A.G.Tansley

2. The following Gas is responsible for Global warming []
a) Carbon dioxide b) Sulphur dioxide c) Oxides of Nitrogen d) None of the above

3. World Environmental Day is celebrated on []
a) Jan 5th b) June 5th c) July 5th d) Sept 5th